Air Quality Analysis Report
Valley View Casino Parking Lot
Valley Center, California
Project No. R04-17
Log No. 04-09-014

Prepared for:

San Pasqual Band of Mission Indian Tribe
Valley Center, California

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Chapter 1. Introduction and Project Description

1.1. Introduction

This air quality assessment evaluates potential impacts caused by construction and operation of the employee parking lot at the Valley View Casino in Valley Center, California. This report has been revised to reflect County comments to the draft report received in November 2005, and April and December 2006. This revised report focuses on the following air quality issues:

- Emissions during construction and operation of the parking lot.
- Carbon monoxide (CO) "Hot Spot" analysis, to address air quality impacts caused by increased traffic volumes at the intersections serving the proposed parking lot.
- Fugitive dust controls during construction of the parking lot.
- Evaluation of potential human health risks associated with temporary operation of diesel generators used for the parking lot's lighting system.

1.2. Project Description

1.2.1. Parking Lot Construction

The project is the construction of an approximately 500-space paved parking lot on a portion of an approximately 10-acre site located at the southwest quadrant of Valley Center Road and North Lake Wohlford Road (Figure 1). This parking lot is not designed to accommodate any proposed increase in usage of the Valley View Casino. The parking lot is intended to be used by casino employees, who will be driven to the casino by shuttle buses.

Access to the parking lot would be gained from Valley Center Road via the frontage road used by the Middle School for bus loading and unloading. No additional driveways or intersections will be created along Valley Center Road. Employees will exit the parking lot to Valley Center Road via the School Bus Road or to North Lake Wolford Road via the right-turn-only exit. No phasing is proposed and no unpaved parking areas will be constructed.

The project site is owned "in fee" by the San Pasqual Band of Mission Indians. It is adjacent to the athletic fields of Valley Center Middle School and approximately one-quarter mile north of the Valley View Casino. The County of San Diego has land use jurisdiction for the site and has required the property to be rezoned from A70 to S86 to allow the site to be used for parking. The parking lot would be used primarily by employees working for Valley View Casino, with occasional public use during special events at Valley Center Middle School, and by various community athletic organizations that use the facilities of the school, such as Pop Warner Football, Valley Center Little League, and the American Youth Soccer Organization. The Middle School and community athletic organizations have used the unimproved site to park cars for many years.

1.2.2. Temporary Parking Lot Lighting

The existing parking lot is illuminated by four portable, modular streetlamps and generator sets. Each streetlamp is powered by a 13-hp portable diesel electrical generator. Figure 1 shows the location of each generator set.

1.2.3. Surrounding Land Use and Sensitive Receptors

Figure 2 is an aerial photograph that shows the existing parking lot and the surrounding land use relevant to the air quality analysis. The parking lot itself is proposed to be zoned for S86, Parking. The site is bordered on the north by Valley Center Road, a high-speed arterial. The properties north and west of the parking lot are zoned A70, Limited Agriculture. One home and one business are on the north side of Valley Center Road across from the parking lot; these two buildings are designated as noise sensitive receivers R-1 and R-2. The Valley Center Middle School is south of the parking lot. Basketball courts and other athletic fields are adjacent to the parking lot; Receiver R-3 represents the basketball courts closest to the parking lot. The closest classrooms at the school are a considerable distance away; Receiver R-4 represents the closest classroom, which is 400 feet from the existing parking lot.

1.2.4. Forecast Traffic Volumes Generated by Parking Lot Users

The parking lot will be used by only two sets of vehicles.

- Passenger cars driven by workers from the Valley View Casino. These workers will be shuttled from the parking lot to the casino using small shuttle buses. The shuttle buses will not park at the new parking lot; they will park at the casino's main parking lot. Large passenger buses will not use the new parking lot.

- Passenger cars driven by participants and viewers attending athletic events at the Middle School. School buses and athletic team buses will not park at the new parking lot.

Figure 3 shows the existing peak-hour traffic volumes and the projected future traffic volumes generated by the parking lot (Linscott Law & Greenspan, 2005). As shown on the figure, the peak-hour traffic volumes generated by the proposed parking lot will be much lower than the current traffic volumes along Valley Center Road and Lake Wohlford Road.

Chapter 2. Environmental Setting

The project site is located in San Diego County, which is designated as the San Diego Air Basin (SDAB). San Diego County is located between the Pacific Ocean to its west; the Anza-Borrego Desert State Park to the east; the Cleveland National Forest to the northeast; and the US/Mexican Border to the south.

The proposed project is located approximately 20 miles inland from the coast. The area may experience coastal conditions for brief periods, but normally has a warm, dry climate. Day humidity is low. Summer temperatures may reach 100 degrees Fahrenheit. Winters are mild, averaging 70 degrees Fahrenheit during the day, with frosty morning readings. (San Diego County Air Pollution Control District — SDAPCD—2005) Total average precipitation is approximately 15.5 inches annually. The average wind speed is approximately 6.5 miles per hour (mph). Wind in the vicinity of the project site blows predominantly from the west (Western Regional Climate Center 2005).

The California Air Resources Board (CARB) has designated the San Diego County as a nonattainment area for ozone, respirable particulate matter (PM10), and fine particulate matter (PM2.5). CARB classifies San Diego County as an attainment area for carbon monoxide (CO). The US Environmental Protection Agency (USEPA) has designated San Diego County as being an attainment (Clean Air Act Section 185A) area for 1-hour ozone, PM10, and CO, and a nonattainment area for 8-hour ozone.

The existing air quality conditions in the project area can be characterized by monitoring data collected in the region. Monitoring data for the last three years (2002–2004) are presented in Table 1. The nearest monitoring stations in the project area are the Escondido–E Valley Parkway station in the City of Escondido. The measurements are presented in parts per million (ppm) or micrograms per cubic meter (mg/m3), and they are compared to the applicable National and California Ambient Air Quality Standards (NAAQS and CAAQS, respectively).

Table 1: Ambient Air Quality Monitoring Data Measured at the Escondido–E Valley Parkway Monitoring Station

Pollutant Standards	2002	2003	2004
Ozone (O_3)			
Maximum 1-Hour Concentration (ppm)	0.100	0.105	0.099
Second-Highest 1-Hour Concentration (ppm)	0.096	0.103	0.098
Maximum 8-Hour Concentration (ppm)	0.081	0.083	0.086
Second-Highest 8-Hour Concentration (ppm)	0.078	0.078	0.085
Number of Days Standard Exceeded[a]			
NAAQS 1-Hour (> 0.12 ppm)	0	0	0
CAAQS 1-Hour (> 0.09 ppm)	2	3	2
NAAQS 8-Hour (> 0.08 ppm)	0	0	2
CAAQS 8-Hour (> 0.07 ppm)	—	—	—
Particulate Matter (PM10[b])			
National[c] Maximum 24-Hour Concentration ($\mu g/m^3$)	51	(179)[g]	57
National[c] Second-Highest 24-Hour Concentration ($\mu g/m^3$)	45	(124)[g]	42
State[d] Maximum 24-Hour Concentration ($\mu g/m^3$)	50	(179)[g]	57
State[d] Second-Highest 24-Hour Concentration ($\mu g/m^3$)	46	(126)[g]	42
National[c] Annual Average Concentration ($\mu g/m^3$)	27	(31.6)[g]	27.5
State[d] Annual Average Concentration ($\mu g/m^3$)	25.1	(32.7)[g]	27.3
Number of Days Standard Exceeded[a]			
NAAQS 24-Hour (> 150 $\mu g/m^3$)[e]	0	—	0
CAAQS 24-Hour (> 50 $\mu g/m^3$)[e]	0	—	1
NAAQS Annual (> 50 $\mu g/m^3$) exceeded?	No	No	No
CAAQS Annual (> 20 $\mu g/m^3$) exceeded?	Yes	Yes	Yes
Particulate Matter (PM2.5)			
Maximum 24-Hour Concentration ($\mu g/m^3$)	53.6	69.2	67.3
Second-Highest 24-Hour Concentration ($\mu g/m^3$)	44.6	37.9	48.7
Annual Average Concentration ($\mu g/m^3$)	16	14.2	14.1
Number of Days Standard Exceeded[a]			
NAAQS 24-Hour (> 65 $\mu g/m^3$)	0	1	1
NAAQS Annual (> 15 $\mu g/m^3$) exceeded?	Yes	No	No
CAAQS Annual (> 12 $\mu g/m^3$) exceeded?	Yes	Yes	Yes
Carbon Monoxide (CO)			
Maximum 1-Hour Concentration (ppm)[f]	8.5	(12.7)[g]	6.3
Second-Highest 1-Hour Concentration (ppm)[f]	7.8	(12.5)[g]	6.1
Maximum 8-Hour Concentration (ppm)	3.85	(10.64)[g]	3.61
Second-Highest 8-Hour Concentration (ppm)	3.77	(7.24)[g]	3.56
Number of Days Standard Exceeded[a]			
NAAQS 1-Hour (> 30 ppm)	0	0	0

Pollutant Standards	2002	2003	2004
CAAQS 1-Hour (≥ 20 ppm)	0	0	0
NAAQS 8-Hour (≥ 9 ppm)	0	—	0
CAAQS 8-Hour (≥ 9ppm)	0	—	0

— = insufficient data available to determine the value.

a. An exceedance is not necessarily a violation.

b. Measurements usually are collected every 6 days.

c. National statistics are based on standard conditions data.

d. State statistics are based on local conditions data, except in the South Coast Air Basin, for which statistics are based on standard conditions data.

e. Mathematical estimate of how many days concentrations would have been measured as higher than the level of the standard had each day been monitored.

f. Source: US Environmental Protection Agency.

g. In October 2003, wildfires caused unusually high levels of CO and PM10.

Source: California Air Resources Board 2005.

Chapter 3. Thresholds of Significance

For this air quality analysis the following thresholds were used to indicate a potentially significant air quality impact (note: in the absence of formally adopted thresholds, the County of San Diego uses Appendix G of CEQA as the thresholds of significance and recognizes the SDAPCD-established screening level thresholds for air quality emissions [e.g., Rules 20.1 et seq.] as screening standards):

- During parking lot construction, daily pollutant emissions exceeding the San Diego County screening-level criteria.
- During parking lot construction, odor emissions affecting a substantial number of people.
- For the carbon monoxide "Hot Spot" analysis, a modeled CO concentration at any point adjacent to any of the project-related intersections exceeding the California Ambient Air Quality Standards.
- For the diesel generator human health risk assessment, an annual-average concentration of diesel particulate matter (DPM) sufficient to result in an increased cancer risk of 1 in one million (1×10^{-6}), based on toxicity and exposure parameters developed by CARB and.

Chapter 4. Pollutant Emissions During Construction and Operations

4.1. Emissions During Construction

Pollutant emissions during construction would be less-than-significant. Construction emissions were estimated using the URBEMIS2002 model with the following assumptions:

- Construction of the approximately 3.5 acres of parking lot would be completed in two months starting in Summer 2006.
- Site grading would require 1,000 cu yd of select import fill, and export of 100 cu yd of spoil.
- Fugitive dust emissions during site grading were estimated based on the URBEMIS2002 default value of 0.11 tons per acre per month and assuming that an average of 1 acre per day would be disturbed during the grading period.

Table 2 lists the estimated construction emissions. The URBEMIS2002 output report is provided in Appendix C. The estimated daily construction emissions are compared to San Diego County's screening-level criteria for air quality impact significance. As listed in Table 2 the estimated daily construction emissions are well below the County's significance criteria. Therefore, air pollutant emissions during construction are considered to be less-than-significant.

Table 2. Air Pollutant Emissions During Parking Lot Construction

Item	ROG	NO_X	CO	SO2	PM10
Emissions during Site Grading (lbs/day)	8.75	70.3	63	0.02	13
Emissions during Paving (lbs/day)	4.51	26.2	35	0.03	1
Significance Criteria (lbs/day)	75*	250	550	40	100
Significant Impact?	No	No	No	No	No

Source: SDCAPCD 2006 (Rules 20.1).

* The significance threshold for ROG emissions is based on South Coast AQMD significance criteria for project construction (Chapter 6 of SCAQMD Air Quality Handbook). No numerical emission thresholds for ROG were established by SCAPCD.

4.2. Emission Reductions Provided by Parking Lot Operation

The proposed parking lot will reduce regional on-road emissions compared to the No-Build alternative. The parking lot would not generate any new vehicle trips (the same number of employees will work at the Casino regardless of whether the parking lot is constructed). However, the parking lot will reduce the distance each employee is required to drive between their home and the Casino. The parking lot is designed to provide parking for 500 employee vehicles. Without the parking lot, each employee would drive the 1.5-mile round trip between Valley Center Road and the Casino. With the parking lot, the employees would park at Valley Center Road and would be delivered to the Casino by shuttle buses. For this screening-level analysis it is assumed the parking lot and shuttle bus system would reduce the employee vehicle miles traveled between Valley Center Road and the Casino by 75%.

Table 3 shows the net reduction in on-road emissions provided by the parking lot. Under the No-Build scenario, each of the 500 cars would travel 1.5 miles round trip for 250 days per year (the equivalent of 187,500 vehicle miles per year of employee travel between Valley Center Road and the casino). With the parking lot and shuttle buses the employee vehicle travel from Valley Center Road to the Casino would be reduced by 75% (to an equivalent of 46,900 vehicle miles per year). EMFAC2002 passenger car emission factors for the year 2006 were used to evaluate the emission reduction.

Table 3. Operational Emission Reductions Provided by Employee Parking Lot

Scenario	ROG	CO	NO_X	PM10
2006 EMFAC Emission Factor (lbs/mile)	0.0015	0.0139	0.0015	0.0001
No-Build Employee Vehicle Travel between Valley Center Road and Casino (vehicle miles per year)	187,500			
Proposed Project: Employee Travel between Valley Center Road and Casino with Parking Lot and Shuttle Buses (vehicle miles per year)	46,900			
No-Build Annual Employee Vehicle Emissions (lbs/year)	281.40	260	281.40	18.90
Employee Vehicle Emissions with Parking Lot (lbs/year)	70.20	650.40	70.20	4.80
Net Reduction (lbs/year)	211.20	1950	211.20	14.10

Chapter 5. Carbon Monoxide and Particulate "Hot Spot" Analysis

5.1. Modeling Methods

The analysis was conducted using the CALINE4 line source dispersion model with EMFAC2002 emission factors. CALINE and EMFAC2002 modeling files are provided in Appendix A. Input parameters required for the CALINE4 model include traffic volumes, intersection LOS, vehicle emission rates, receptor locations, meteorological conditions, and background concentrations. The CO modeling was performed for 2005 existing conditions and compared to projected 2005 conditions.

Traffic Volumes. The analysis was done using the morning peak-hour traffic volumes shown in Figure 3 for the existing condition and full-buildout condition (Linscott, Law, & Greenspan 2005).

Vehicle Emission Rates. Vehicle emission rates were determined using the ARB Board's EMFAC2002 (version 2.2) emission rate program. Free-flow traffic speeds were adjusted to reflect congested speeds. Emission rates were modeled based on 2005 existing conditions, and an assumed 2005 construction year for completion of the Phase 2 parking lot.

Receptor Locations. CO concentrations were estimated at locations 3 meters from the edge of the intersection in all directions. Receptor heights were set at 6 feet.

Meteorological Conditions. Meteorological inputs to the CALINE4 model were determined using methodology recommended in the CO Protocol (Garza et al. 1997). The meteorological conditions used in the modeling represent a calm winter period. The worst-case wind angles option was used to determine a worst-case concentration for each receptor. The meteorological inputs include: 1 meter per second wind speed, ground-level temperature inversion (atmospheric stability class G), wind direction standard deviation equal to ten degrees, and a mixing height of 1,000 meters.

Background Concentrations and Eight-Hour Values. A background concentration of 7.8 ppm was added to the modeled 1-hour values to account for regional sources of CO not included in the modeling. Eight-hour modeled values were calculated from the 1-hour values using a persistence factor of 0.7. Background concentration of 3.8 ppm was added to the modeled 8-hour values. All background concentration data

were taken from the monitoring data provided by the CARB (2005) and EPA (2005a).

5.2. CO "Hot Spot" Results

Table 4 presents maximum 1-hour and 8-hour CO concentrations predicted at each intersection. The results show that CO concentrations would not exceed the California CO standards under either the existing conditions or the full-buildout condition. The modeled CO concentrations are identical for both the existing condition and the full-buildout condition.

Table 4. Modeled CO Concentrations (ppm)

	Existing Condition (2005)		Full-Buildout Phase 2 (2005)	
Intersection	1-hour	8-hour	1-hour	8-hour
Valley Center Rd. at School Bus Rd.	8.3	4.2	8.3	4.2
Valley Center Rd. at Lake Wohlford Rd.	8.4	4.2	8.4	4.2
School Bus Rd. at Lake Wohlford Rd.	8.3	4.2	8.3	4.2
California Ambient Air Quality Standard	20	9	20	9

Note: All concentrations include background values of 7.8 ppm (1-hour) and 3.8 ppm (8-hour)

5.3. PM10 and PM2.5 Issues

There is little potential for vehicles using the parking lots to generate significant particulate emissions. The existing lot has already been paved, and no unpaved parking areas will be constructed as part of the expansion.

Chapter 6. Diesel Generator Human Health Assessment

6.1. General Approach

The existing parking lot is currently illuminated by four portable streetlamps, each of which is powered by its own 13-hp diesel generator. Upon completion of the expanded parking lot, the temporary generators will be removed and the streetlamps will be connected to line power. During the interim period, before the temporary generators are removed, the generators' emissions have the potential to impact the nearest home and business on the north side of Valley Center Road and students at the nearby Valley Center Middle School. Therefore, a human health risk assessment was conducted to evaluate the potential worst-case impacts associated with diesel particulate matter (DPM) emitted by the three generators.

6.2. Emission Requirements for Temporary Generators

The California Air Resources Board and the San Diego County Air Pollution Control District have enacted an Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition (Diesel) Engines. The ATCM applies to, among other items, "stationary diesel engines" purchased after January 1, 2005. Although the streetlamp generators used at the Casino are portable, they will be used at the parking lot for more than 12 months before they are removed, so for purposes of the ATCM they are considered "stationary diesel engines" and therefore subject to the regulation.

According to the ATCM the casino operator must do the following:

- Submit an "ATCM Engine Data Report" form to the Air Pollution Control District describing the generators.
- Supply information provided by the seller of the generator to confirm the generator emissions satisfy the allowable limits specified by the Tier 1 Off-Road Compression-Ignition Engine Standard enacted in 2004 by CARB. For portable generators smaller than 25 hp the Tier 1 emission standards are:

PM10	0.6 grams/hp-hr
CO	4.9 grams/hp-hr
NOx + ROG	7.1 grams/hp-hr

6.3. Modeling Methods

The human health risk assessment was conducted in general accordance with the guidelines recommended by the SCAQMD by their document "Health Risk Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis" (SCAQMD 2003). The general modeling methods were as follows:

Diesel Generator Emissions. Each of the four 12.7-hp generators was assumed to operate at full load for 10 hours per day. The generators were purchased in California, so it is presumed the generators satisfy the Tier1 off-road engine emission standards as required by the ATCM. Emission factor data are provided in Appendix B.

SCREEN3 Modeling for Annual-Average Ambient Concentrations. Impacts were evaluated at the four representative receptor locations shown in Figure 2. The worst-case ambient concentrations at each receptor site were estimated using EPA's SCREEN3 dispersion model. Each generator was modeled as a 2-meter tall and 0.15-meter diameter stack with an exit temperature of 400 degrees F and a 20 meter per second exit velocity. The SCREEN3 model automatically assigns worst-case meteorological data to estimate the worst-case ground-level concentration. SCREEN3 report files are provided in Appendix B. The worst-case 1-hour concentrations estimated by SCREEN3 were converted into worst-case annual-average concentrations by applying a time weighting factor of 0.08.

Cancer Toxicity and Exposure Parameters. CARB's most recent toxicity data for diesel particulate matter specifies a Unit Risk Factor of $3.0 \times 10^{-4}/(ug/m^3)$, based on the receptor being exposed to the emissions for 24 hours per day for a 70-year period. For this project, one year of exposure parameter was evaluated:

- Exposure for the interim 1-year period before the portable generators are removed.

The lifetime cancer risk at each receptor location was calculated using the following equation (SCAQMD, 2003):

$$CR_{DPM} = C_{DPM} \times URF_{DPM} \times LEA \qquad \text{(Equation 1)}$$

Where

CR_{DPM} is the probability of an individual developing cancer as a result of exposure to DPM from the generators

C_{DPM} is the annual-average concentration of DPM (ug/m3)

URF_{DPM} is CARB's most recent unit risk factor for DPM, 3 x 10^{-4}/(ug/m^3).

LEA is the lifetime exposure adjustment: a value of 0.006 for a 1-year exposure duration for 10 hours per day.

6.4. Emission Inventory for Diesel Generators

Table 5 lists the estimated emissions from the combined four portable diesel generators, assuming each generator operates 10 hours per day, 365 days per year.

Table 5. Diesel Generator Emission Rates

Pollutant	Tier 1 Off-Road Engine Emission Factor (g/hp-hr)	Engine hp	Generator hrs/day	Generator Emissions (lbs/day)	Days per Year	Generator Emissions (tons/year)
PM10	0.6	12.7	40	0.67	365	0.123
Nox + ROG	5.6	12.7	40	6.27	365	1.14
CO	4.9	12.7	40	5.48	365	1.00
Sox	0.9	12.7	40	1.01	365	0.184

Note: Based on 4 generators, 10 hours per day, 365 days per year

6.5. Ambient Impacts and Human Health Impacts

Table 6 shows the modeled worst-case SCREEN3 ambient impacts at each receptor location and compares the worst-case concentrations to the allowable California Ambient Air Quality Standards. In each case, all of the modeled pollutant concentrations are much lower than the allowable limits. The SCREEN3 modeling assumptions are shown in Appendix B.

Table 6. Diesel Generator Ambient Concentrations (Worst-Case SCREEN3 Modeling)

		8-Hour Conc. (ug/m3)		24-Hour Conc. (ug/m3)		Annual Conc. (ug/m3)	
Receptor	Location	PM10	CO	PM10	CO	PM10	CO
R1	Western House	N/A	28.4	2.0	N/A	0.4	N/A
R2	Commercial Business	N/A	24.0	1.7	N/A	0.3	N/A
R3	School Playground	N/A	25.2	1.8	N/A	0.4	N/A
R4	School Classroom	N/A	18.2	1.3	N/A	0.3	N/A
California Ambient Air Quality Standards		N/A	10,440	50	N/A	20	N/A

Based on 1-hour concentration conversion factors: 8-hour = 0.7; annual = 0.08.

Table 7 shows the estimated lifetime cancer risk at the nearby receptors, assuming the diesel generators operate for only one year before they are removed and replaced by line electrical power. The highest estimated cancer risk occurs at Receptor R-1 (the closest home and business across Valley Center Road), but the estimated cancer risk is only 0.71×10^{-6}. That maximum value is less than the significance threshold of 1×10^{-6}, so the human health risk for this scenario is considered less-than-significant.

Table 7. Estimated Cancer Risk from 1-Year Operation of Diesel Generators

Receptor	Location	Annual Diesel Particulate Concentration (ug/m3)	CARB Carcinogen Unit Risk Factor (Risk per ug/m3)	Lifetime Exposure Factor LEA	Cancer Risk Due to Generator Exhaust
R1	Western House	0.40	3.00E-04	0.0060	7.1E-07
R2	Commercial Business	0.34	3.00E-04	0.0060	6.0E-07
R3	School Playground	0.35	3.00E-04	0.0060	6.3E-07
R4	School Classroom	0.25	3.00E-04	0.0060	4.5E-07

Note: LEA based on 4 generators, 10 hours per day, for 1 year

6.6. Diesel Generator Mitigation

The generators were purchased in California, so it is presumed the generator emissions comply with the emission standard specified by the ATCM. As required by the ATCM, the Casino will submit an "ATCM Engine Data Report" to the San Diego County Air Pollution Control District to confirm the engine emissions.

As shown in Table 7 the hypothetical worst-case cancer risks at the nearby home, Business, and the Valley Center Middle School are less than the 1×10^{-6} significance threshold if the generators operate for only one year.

The diesel generators will be removed from operation following completion of the expanded parking lot construction.

Chapter 7. Air Quality Impacts During Future Parking Lot Construction

7.1. Fugitive Dust Control

Construction activities for the expanded parking lot would result in localized, short-term impacts on ambient air quality in the area. Temporary construction emissions would result from grubbing/land clearing, grading/excavation, paving activities, drainage/utilities installation, and construction worker commuting patterns. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather. It is estimated that construction activities would begin in 2007 and would require several weeks of construction to complete the parking lot. Therefore, the construction impacts of the project would be less than significant.

SDAPCD has not yet developed a rule requiring specific "reasonably available control measures" (RACM) to suppress fugitive dust emissions. Regardless, the applicant will employ RACMs to reduce the amount of fugitive dust generated from construction of the proposed project, including the following:

- Inactive Construction Areas. Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas.
- Exposed stockpiles. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specification to exposed piles.
- Active Site Areas. Water active site twice daily.
- Hauling. All haul trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain two feet of freeboard.
- Adjacent Roadways. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the project site.
- Adjacent Roadways. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads.
- Unpaved Roads and Parking/Staging Areas. Apply water three times daily or non-toxic soil stabilizers according to manufacturers' specification to all unpaved roads and parking or staging areas.

- Speed Limit. Traffic speeds on unpaved areas shall be limited to 10 miles per hour.
- Disturbed Areas. When active construction ceases on the site, replace ground cover as quickly as possible.

7.2. Construction Equipment Tailpipe Emissions

Diesel particulate matter is considered a carcinogenic by California regulatory agencies, and it is recognized that sensitive receivers exposed to high concentrations of diesel particulate matter for many years of duration could experience a significant cancer risk. An example of such a significant cancer risk would be people living for many years next to a heavily used railroad line. However, it is highly unlikely that off-site receptors downwind of temporary construction sites would experience any significant cancer risk directly associated with diesel emissions from the construction project.

The assessment of human health cancer risk is typically based on a 70-year exposure period. Construction activities are sporadic, transitory, and short-term in nature, and once construction activities have ceased, so too have emissions from construction activities. Because the duration of exposure to diesel exhaust during the temporary construction projects will be much shorter than the assumed 70-year exposure period, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed persons. - It is estimated that construction activities would continue for less than 3 months.

7.3. Odor Impacts During Paving Operations

Paving of the proposed 3.5 acre parking lot expansion would be done using operations similar to any other paving project in the County. Like all other paving operations, paving at the Valley Center Casino parking lot would generate some odor emissions. Depending on weather conditions, those odor emissions might be discernible at the closest home, business, and school classrooms. However, the odor emissions would be generated only for a brief period when paving is beingdone. Therefore, odor emissions are considered less-than-significant.

Chapter 8. Overall Evaluation of CEQA Air Quality Issues

This section evaluates the general questions prescribed under the County's "Guidelines for Determining Significance - Air Quality" and Appendix G.III, Environmental Checklist Form, under the CEQA Guidelines.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan? No, it would not. Emissions during construction would be less than the County's air quality significance criteria. The parking lot would reduce vehicle travel by employees, and thereby slightly reduce air emissions compared to the No-Build alternative.

b. Would the project violate any air quality standard or contribute to an existing or predicted air quality violation? No, it would not. As described in this report, the parking lot would not create a CO "Hot Spot." The parking lot would reduce vehicle travel by employees, and thereby slightly reduce air emissions compared to the No-Build alternative.

c. Would the project result in a cumulatively considerable net increase of PM10, CO, Nox, or ROG? No, it would not. The parking lot would reduce vehicle travel by employees, and thereby slightly reduce air emissions compared to the No-Build alternative.

d. Would the project expose sensitive receptors (including schools) to substantial pollutant concentrations? No, it would not. Emissions during construction would be less than the County's air quality significance criteria. The parking lot would reduce vehicle travel by employees, and thereby slightly reduce air emissions compared to the No-Build alternative. Emissions from the temporary generators used for temporary lighting of the parking lot would not cause a significant cancer risk.

e. Would the project create objectionable odors affecting a substantial number of people? No, it would not. Paving operations during construction of the parking lot might generate discernible odors, but the odor would be temporary and localized.

Chapter 9. Conclusions and Recommendations

The conclusions of this air quality analysis are as follows:

- The proposed project would slightly reduce vehicular travel by employees using the lot. Therefore, the project would slightly reduce regional on-road vehicle emissions compared to the No-Build alternative.
- The peak-hour traffic volume of additional cars using the new parking lot is much lower than the existing traffic volumes on public roads serving the area, so the CO hot-spot analysis indicates the new vehicles entering and exiting the parking lot will have no significant impact on ambient CO concentrations.
- The temporary diesel generators are subject to the emission standards and reporting requirements under the San Diego County Air Pollution Control District's Airborne Toxic Control Measure. The generators use engines that satisfy the ATCM for particulate emissions.
- If the existing diesel generators used to illuminate the existing parking lot are removed within one year of completion of the expanded parking lot, then diesel particulate emissions from the generators would not cause any significant human health risks at the nearest home, business, or the nearby Valley Center Middle School.
- The applicant will employ Reasonably Available Control Measures to minimize fugitive dust during future construction of the parking lot.

Chapter 10. References

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